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NOTE ON A PUERTO RICAN SPECIES OF EULOPHIDAE (HYMENOPTERA).

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The following note will help to clarify the taxonomic relationship of an interesting species of Eulophidae described by Ashmead.

Ceratoneura femorata (Ashmead), new combination.

Tetrastichodes femoratus Ashm., Journ. Linn. Soc. Lond. Zool., vol. 25, p. 183, 1894.

More than one hundred specimens of a species of Ceratoneura reared by Prof. J. G. Needham from seedpods of Jussiaea angustifolia taken at Rio Piedras, Puerto Rico, during the winter and spring of 1940, have been examined. These have been compared with a male specimen in the United States National Museum collected by H. H. Smith on the island of St. Vincent, British West Indies, which bears the label "Tetrastichodes femoratus Ashm., 3" Type" and which agrees with the original description. The actual type of Ashmead's species is believed to be in the British Museum, but since the species was described from a male and a female there appears to be no reason to believe that the male specimen referred to is not the male type. The male specimens reared by Prof. Needham seem to agree very completely with this type specimen and the females of his series do not differ from the description.

The species has a short but distinct abdominal petiole and the antenna of the female has four transverse ring joints. The fourth ring joint is no larger than the others, in which respect it differs from other species of the genus. The antenna of the male also differs to some extent from that of typical *Ceratoneura*. This consists of a fusiform scape which has a slight swelling on the ventral margin near apex, a pedicel nearly half as long as the scape, three transverse ring joints, a four-jointed funicle. and a three-jointed club. The first funicular joint is subquadrate, narrower than the others, and probably is merely the fourth ring-joint enlarged. The second funicle joint is about one and one-half times as long as broad, while the third and

fourth joints are about as broad as long. The club is indistinctly three-jointed, distinctly broader than the funicle, nearly as long as the three preceding funicular joints combined, and terminates in a short spine. None of the funicular joints is provided with whorls of long hairs, the hairs being instead somewhat shorter than the segments and more or less evenly distributed.

Typical *Ceratoneura* has the fourth ring joint in the female subquadrate and longer than the other three ring joints combined, somewhat resembling a funicular joint. The male antenna has three small transverse ring joints, a 5-jointed funicle, and a 2-jointed club, each funicular joint bearing a whorl of long hairs.

Despite these obvious differences, especially in the male antenna, I believe the species is best placed in the genus *Ceratoneura*, which is the only genus of Tetrastichinae in which the abdomen is petiolate, so far recorded from North America.

The exact host relations of the species are not known to me. Ceratoneura indi Girault (Descriptiones Hymenopterorum Chalcidoidicarum Variorum cum Observationibus, V, 1917, p. 10), according to labels on some of the specimens in the type series, makes galls in the flowerheads of Sesbania aegyptica although other specimens of the series are merely labeled "from galls" on this plant. C. pretiosa Gahan (Proc. U. S. Nat. Mus., vol. 48, 1914, p. 165), as stated in the description, was reared from galls on Mimosa at Brownsville, Tex. A label on one specimen of the type series, however, reads "Gall-making Chalcidid on Mimosa, associated with Asphondylia." These records have been considered dubious. If actually correct, then it is probable that femoratus is likewise a gall maker, as Prof. Needham suspects. Not having seen the evidence in any of these instances, I am not in a position to say whether or not they are really gall makers.

INSECTS FROM SEED PODS OF THE PRIMROSE WILLOW, JUSSIAEA ANGUSTIFOLIA.

By James G. Needham.

This primrose willow is a lusty annual weed that is commonly found growing in the wet soil in the bottom or roadside ditches in Puerto Rico. Because of its long, narrow cylindric seed pods it is there called by the Spanish name of *Yerba de clavo*. During the spring of 1940 while residing in Rio Piedras, I was attracted by the bright yellow flowers that decorate the ditches in the early morning, and that shed their petals in days of bright sunshine before mid-forenoon. Thus I came to notice the swollen condition of many of the seed pods.